

## ABSTRACT

A WDM hubbed ring network includes a single central office connected to a plurality of remote nodes by one optical transmission line. The central office generates at each wavelength corresponding to each channel in a first channel group a high-  
5 priority optical signal and a low-priority optical signal. These signals are then WDM-multiplexed and transmitted to each of the remote nodes in different directions along the ring via the optical transmission line. The central office receives a high-priority optical signal and a low-priority optical signal with a wavelength corresponding to each channel in a second channel group from the remote nodes via the optical transmission  
10 line in different directions.